

## BLOCK CODING ACROSS DIGITAL CABLE AND SATELLITE COMMUNICATION CHANNELS

### ABSTRACT OF THE DISCLOSURE

Error correction coding across multiple channels is provided in multi-  
5 channel transmission systems. Specifically, redundancy is provided by selecting a  
portion of original data from each of a plurality of original channels, performing at least  
one encoding operation using the portions of original data to produce at least one  
portion of redundancy data, including the portion of redundancy data in at least one  
redundancy channel, and transmitting the redundancy channel along with the original  
10 channels. Error correction is achieved by receiving at least one redundancy channel  
and a plurality of original channels, selecting a portion of redundancy data from the  
redundancy channel, selecting a portion of original data from each of the original  
channels, and performing at least one decoding operation using the portion of  
redundancy data and the portions of original data to correct at least one error in the  
15 portions of original data.

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